

**Before the  
Federal Communications Commission  
Washington, D.C. 20554**

In the Matter of	)	
	)	
Amendment of the Commission's Rules	)	PR Docket No. 92-257
Concerning Maritime Communications	)	
	)	
Petition for Rule Making filed by	)	RM-9664
Regionet Wireless License, LLC	)	

**Supplement to Opposition to Petition for Reconsideration  
Ex Parte**

Warren C. Havens ("Havens") is a licensee in the AMTS service. Havens hereby submits this supplement to his opposition (the "Opposition") to the petitions for reconsideration submitted by Mobex Communications, Inc. (Mobex) and Paging Systems, Inc. ("PSI") of the rules establishing service contours and interference protection contours in the AMTS service adopted in the Fifth Report and Order in the above docket<sup>1</sup> (the "Contour Petitions"). To consider major errors pointed out below in the Contour Petitions and the related Replies, and for a full and complete record in this matter, this filing should be considered.

The 8-15-02 Declaratory Ruling "Integrated" Discussion

Mobex and PSI, in their Petitions and Replies, allege that the Division's 8-15-02 Declaratory Ruling (the "Ruling") addressed to me held that "Integrated" in the definition of AMTS requires continuity of coverage. The Division stated:

You also seek guidance regarding the meaning of the word "integrated" in the AMTS definition. In the context of AMTS, the term "integrated" conveys the requirement that the base stations in

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<sup>1</sup> Second Memorandum Opinion and Order and Fifth Report and Order, FCC 02-74, PR Docket No. 92-257 (the "5<sup>th</sup> R&O").

an AMTS system must be connected, thereby ensuring seamless communication throughout the system for a vessel traveling along a served waterway. [Footnotes in original deleted.]

First, as discussed in my Opposition, in the 5<sup>th</sup> R&O, the Commission replaced the old §80.475(a) with a new §80.475(a) which did away with the continuity of coverage requirement in the old one. Thus, the “Integrated” requirement applied up until then, and after then, the AMTS definition must be considered modified to conform to the new §80.475(a). Accordingly, the “Integrated” requirement is relevant not to the arguments by Mobex and PSI in their Contour Petitions (that, if they do not get larger service and interference contours than provided in the 5<sup>th</sup> R&O, then they will not be able to fulfill the Integrated requirement), but to the arguments in my Opposition that many of the Mobex stations do not fulfill the requirements of the rules at the critical junctures: application, construction deadline, operation, and renewal.

The above quotation described “Integrated” as meaning *connected base stations*, and *seamless communication*. Connected base stations implies at least that a caller accessing one station can connect to a caller accessing another, a common real-life function. Seamless communication, as described above from the end-user experience, can only mean real-life communication, not theoretical contour coverage. By clear evidence in their AMTS licenses files, Mobex licenses fail on both counts.

Seamless Communications: My Opposition provided ample evidence as to why a large percentage of Mobex stations could not possibly achieve this, as they do not even provide the contour-map theoretical basis for such, especially if their far-inland locations are factored in which make 17 dBu contours unrealistic for coverage of the far-distant waterway.

Connected Stations: As noted in my Opposition, Mobex has reported to the Commission that it uses LTR base station equipment at their AMTS stations. For example, see pages 22 and 23 of my Opposition (letter from Regionet counsel to the FCC). LTR does not provide for “Integrated” service per the preceding quote, in that it will not allow the above noted minimum connection between base stations. See attachment below from EF Johnson, the originator of LTR. As described therein, and as is widely known, LTR provides simple, single-site dispatch communication, not multi-site connected communication.

Further, the above-cited letter from Regionet Counsel to the FCC also makes clear that LTR does not allow for priority access service to marine traffic by a station also serving land units, as required in §80.123(b). That is confirmed in the attachment hereto.

Thus, (i) if Mobex, or its wholly owned Regionet or Watercom, used a LTR base station to provide service to land traffic, it was in violation of §80.123(b) if prior to the effective date of the new §80.475(a) (see above), *and construction and operation with such equipment did not qualify under §80.49 and §1.946*, and (ii) after that date, then—per the arguments of Mobex (and PSI) as to the ongoing requirement to provide multi-station seamless coverage and communications—if it has been using LTR base stations to provide service to land and marine traffic, it is in violation of §80.123(b).

Respectfully,

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October 7, 2002 submitted via FCC ECFS

## Attachment

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### LTR technology

The following are verbatim excerpts from the US Patent (5,815,799) issued to EF Johnson for its new LTR Net wherein the limitations of the older LTR are discussed. Underlining and other emphases added. Items in brackets added.

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. . . . Priority system for a wide area [multi-site] transmission trunked communication system

. . . . For further explanation of the *preferred conventional transmission trunked communication systems*, reference is made to the description of the operation of the ClearChannel LTR.RTM. system contained in the manual entitled "E.F. Johnson ClearChannel LTR Application Note", Part No. 009-0001-020 (Rev. 5, October 1988), available from E.F. Johnson Company, Waseca, Minn., a copy of which is attached as Appendix A and is fully incorporated by reference herein.

Transmission trunked communication systems have proven to be an economical and effective means for establishing voice and data communications between a dispatch console or control station and a fleet of mobile vehicles in a given coverage zone. *However, the capability of such trunked systems to provide radio communications over a wide area serviced by a plurality of preferably adjacent coverage zones [multi-site systems with overlapping continuity of communication] has been limited because of the problems involved in linking multiple coverage zones and because of the limitations of the switching and signaling protocols of present transmission trunked communication systems.*

Present transmission trunked communication systems of the type described above are generally unable to transfer voice/data communication between coverage zones, because the repeaters in such systems are interconnected only by a single time slot status bus. *As a result, the only method of interconnecting repeaters in different coverage areas is to use an external network, i.e. routing the communication as a long-distance telephone call from a repeater interconnect or interface to a telephone exchange and then back through a second repeater interconnect to the remote repeater location. [This is very inefficient in equipment and cost, decreases reliability, and increases call set up time.]* These channels are then "hung" to lock the channels in for the duration of the call. In addition to the increased expense and inconvenience of such an external network, the use of a repeater interconnect prevents usage of the channels in each trunked system over which the communication is occurring for the entire period of the communication.

*Even in those instances where inter-coverage zone communications are made through an external network, such communications are for individuals calls, not fleet calls, and are limited to a few preselected users on each system.* It would be desirable to provide unique ID numbers for each user on a wide area network to allow for direct entry of the unique ID to establish private communication between users on the network, as well as fleet calls between groups of users on the network. *Unfortunately, it is impossible to accommodate unique ID numbers in the preferred present transmission trunked communication system [this disallows priority access under §80.123(b)] because the number of digital bits required to represent such unique ID numbers exceeds the maximum number of bits that the trunked systems can communicate via the established signaling protocol. The signaling protocol of the preferred transmission trunked communication system is also limited in the number of channels that may be grouped together per trunked system. For example, the signaling protocol of the LTR.RTM. trunked system is limited to 20 channels per system and uses a look-up table to translate the channel information transmitted by the signaling protocol into the actual frequency pair assigned to that channel.*

Another problem with the conventional switching and signaling protocols is that such protocols are unable to allow for the implementation of an extended feature set of radio communication capabilities on the preferred conventional transmission trunked communication systems. *For example, present trunked systems are generally unable to establish priority access for users in a given coverage zone. [AMTS rules require priority access to maritime traffic users under §80.123(b).]* Present trunked systems are also unable to interrogate and reprogram or otherwise modify the operation of mobiles without having the mobile transceiver unit physically brought to a service facility to be reprogrammed. A mobile traveling from one coverage zone to another coverage zone, for instance, needs to be reprogrammed for a different set of groups over which communications will be received. *Such reprogramming cannot be done "on the fly" in present systems, and mobiles are therefor not able to transit coverage zones at will. [AMTS rules, prior to the new §80.475(a) (see text above) required what is just stated: see text above.]*

[Rest of patent application not relevant and not included.]